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# Knowledge sharing in a global automotive corporation

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**Keywords**
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**Abstract**

*This paper reports on research undertaken into Knowledge Sharing (KS) within the Sales and Marketing Operations of a global automotive company. The organisation had set up a Global Knowledge Centre to promote and coordinate KS between its markets. The research aimed to understand the effectiveness and barriers to KS by interviewing senior managers from markets around the world. The findings identified the key role of informal KS but challenged the conventional belief that interpersonal 'homophily'is a key antecedent for KS to take place. The research identifies instead key market characteristics that act as a greater factor in determining what is considered as relevant and creditable knowledge within the organisation. In conclusion the concept of 'homoplily' is redefined in the context of the global corporation.*

## 1.0 Introduction

This research was conducted in conjunction with a global automotive companywhose knowledge management coordination was based in the United States. The aim was to explore how Knowledge Sharing (KS) could be improved within the network of national sales and marketing companies that comprised organisation's global distribution system. The organisation had had considerable success in knowledge sharing on the manufacturing side of the company. Most of the information shared was based on solving manufacturing issues using their specific production system. A Global Knowledge Centre (GKC) was set up to replicate this same type of activity but in the area of sales and marketing.

The GKC set up a structure to facilitate KS which including global and regional conferences bringing delegates together to share what was perceived to be best practise. The centre also published best practise bulletins and guide looks which formalised learning and then formally distributed it or made it available via the internet. The company had also set up a global blog on which people could pose questions to the rest of the organisation with the aim that others may have experienced a similar situation and could therefore provide appropriate advice or even a potential solution to the problem.

## 2.0 Literature

It has been widely recognised that the ability to generate and then integrate knowledge within the structure of an organisation is essential to gaining and sustaining a competitive advantage in the global market place. Argote and Ingram 2000, Ghoshal and Moran 1996, McEvily, Eisenhardt and Prescott 2004). This is particularly challenging for global organisations as their dispersed nature provides both a challenge and an opportunity. Kogut and Zander 1993 and Westney 2001 argue that the Multi National Corporation has the opportunity to exploit knowledge across a variety of very different geographical, cultural and social contexts. This argument is supported by Doz, Santos and Williamson 2001 and Westney 2001 who identify that the dispersed nature of the organisation allows for external knowledge to be brought into the organisation that can aid in the value generation process across the whole company.

Almeida et al (2002:148) suggests that there is a consensus that multinational organisations are 'an international network that creates, accesses, integrates and applies knowledge in multiple locations.' Cross and Cummings (2004) argue that senior management in global organisations

should focus on developing Knowledge Sharing Connections (KSC) that will build into a Knowledge Sharing Network (KSN). Javernick-Will (2011) argues that multinational organisations spend 'tremendous resources creating KSNs and Communities of Practise (COPs) that connect employees aligned in either interest or task across geographical boundaries and attempt to make knowledge available across the organisation.' Cummings (2004) produced evidence that performance could be enhanced at both the project and individual level (Cross and Cummings 2004).

However the dispersed nature of the organisation can also present challenges that mitigate against the internal flow of knowledge. Brown and Dugaid (2000) argue that structural boundaries within the organisation contribute to less-than- perfect knowledge exchange across these barriers, these can be units, functions or national boundaries. By contrast to Almeida et al (2002) Carlile (2004:566) argues that 'instead of seeing the firm as a bundle of resources….it can be more completely described as a bundle of different types of boundaries where knowledge must be shared and assessed.'

There has been little research on how to overcome structural boundaries and the impact they have on KS (Carlile 2004, Goodall and Roberts 2003) althoughthere are numerous examples quoted on where KS has been instrumental in the development of new products (Hansen 1999) and the sharing of best practice (Tsai and Goshal 1998, Tsai 2001.)

Previous research shows that the effectiveness of KS is influenced by both the characteristics of the knowledge and the properties of the sender, receiver and the transmission channel. (Argote, McEvily and Reagans 2003) This is further complicated by the very nature of an MNC or global corporation in that it is geographically dispersed which means that cultural and linguistic boundaries exist between the units and the people working in them. (Shenkar,2001) Subsequently Makela et al (2007) and Makela et (2012) have suggested that interpersonal similarity or 'homophily' in the form of nationality, language and organisational function are positive indicators for the potential for KS to take place. They argue that the interpersonal similarity can influence KS in such a way that similar people are more likely to share than those who are dissimilar. Social scientists have frequently documented similarity as a powerful predictor of interpersonal connection (McPherson et al 2001) both within organisations (Kleinbaum et al 2013) and outside them (Moody 2001).

The literature draws up a number of key issues surrounding KS in global corporations. KS is seen to be positive in providing competitive advantage to the organisation. However there are a number of structural,cultural and linguistic boundaries that cause barriers to KS. Very little has been written on how to overcome the barriers but a number of researchers have looked at areas that have succeeded and concluded that the concept of interpersonal similarity or homophily is a key factor is facilitating effective KS.

**3.0 Objective**

The aim of the research was to use one specific organisation as a case example to explore in depth the interrelationships between staff operating in the company but operating in different parts of the world. They were all operating under one brand and were all involved in the same activity – the marketing and selling of cars.

The objective was to examine in the light of the literature to identify:

- What worked well in facilitating KS within the organisation?
- What were the barriers to KS?
- How could these be overcome?

**4.0 Research Methodology**

The methodology used was qualitative as firstly there is not a common language or set of concepts that could be tested and quantified and secondly because of this it was felt necessary to seek clarification of both understanding and meaning of the responses. The aim was to gain an in

depth understanding of the respondents' opinion of KS and its importance. Semi-structured interviews were conducted by Skype/Telephone and the content recorded.
The semi structured questionnaire can be found in Appendix 1.

The wide range of markets covered meant that the respondents although working for the same organisation were at different stages of economic and technological development. The need to allow respondents to identify the context and market background was a key feature of the interviews. The questions were used as prompts to direct the interview as opposed to being a direct request for a response. As a result the responses produced a wide range of diverse perspectives on the topic. The analysis of the data was undertaken using Grounded Theory (Jones 1987) the justification for this approach was that there was a large amount of non- standard data generated and that rather than forcing data within logico deductively derived assumptions and categories the research was used to generate a grounded theory which 'fits' and 'works' because it was derived from the concepts and categories used by social actors themselves to interpret and organise their world.'

The markets examined were:

- Algeria
- Canada
- Columbia
- Costa Rica
- Italy
- New Zealand
- Dubai
- Kuwait
- South Korea
- Netherlands
- Chile
- Belgium
- US
- Turkey
- Saudi Arabia
- Russia

**5.0 Findings**

**5.1 Knowledge Sharing- Formal v Informal**

Almost all markets reported the importance of 'informal' networks as a starting point for knowledge sharing at the local, regional and national levels. The 'Informal' described by respondents had a number of characteristics:

- The ability to access individuals outside the formal hierarchy who either had relevant knowledge, or could facilitate introductions to those with the relevant knowledge
- The ability to discuss areas of knowledge to clarify context, culture, and other details that were not contained within the structure
- The ability to identify problems / issues that may not have been shared within knowledge sharing documentation.

This informal knowledge sharing was made possible through the long-term nature of relationships between individuals. This finding supports the argument put forward by Argote and Ingram (2000), Fosse (2007) and Minbaeva et al (2009) that the informal interpersonal exchanges take place across boundaries and these become the essential micro foundation of unit level knowledge flows. An interesting observation from the research was the link between the formal and informal

aspects of KS. The company offers forums for people across the organisation to meet and network. These formed the initial bases for many of the relationships formed.

Considerable value was reported by the majority of respondents when discussing forums. As well as the explicit technical content that was shared, respondents cited forums as being an excellent way of developing networks and therefore informal knowledge sharing. Many respondents – particularly those in the less developed markets – suggested that more forums would be beneficial to accelerate knowledge sharing and the implementation of projects in their markets. Not only was there a benefit in direct contact, but also individuals reported using these events to identify 2nd level contacts that could support knowledge sharing requirements.

Some respondents also reported the use of non-company specific forums. These were used to support either local legislative / market issues or technical (IT) / vendor activity. There was no mention of information that was gathered through these external events being used to populate the company knowledge management systems.

Manville and Foote (1996:80) introduced the concept of Communities of Practice (COP) into the discussion of KS. They defined COPs as being 'a group of professional informally bound to one another through exposure to a common class of problems, common pursuit of solutions, and thereby themselves embodying a store of knowledge.' It is evident that the company organised forums acted in the development of COPs although the indication from the responses was that these were fragmented.

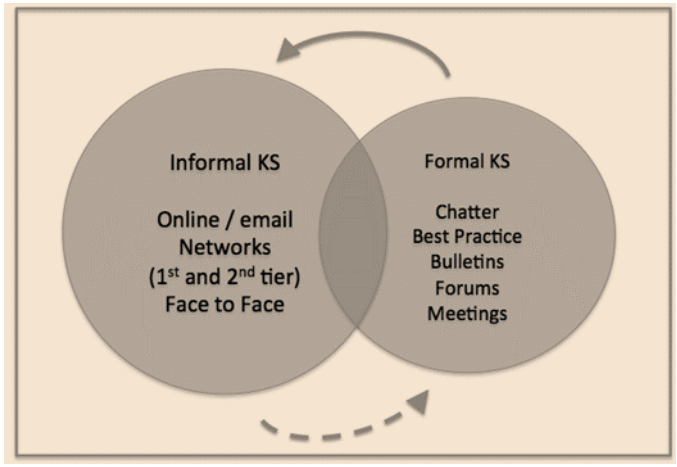



Fig. 1

The research indicated that whilst many formal KS activities lead to increased informal KS, there was little or no reported flow of activity in the other direction. The implication of this is that there was no real feedback from informal supplementary generation of knowledge via the COPs into the more formal organisational structures. This has the potential to develop a two tier structure where there is an 'official' view but underlying this remains a potentially dangerous counter view that is communicated through the informal channels. (See Fig.1)

**5.2 Project Orientated Knowledge Management**

It was apparent throughout the research that discussions about Knowledge Management quickly became focused on Knowledge Management to support projects, where projects could be described as one of change programmes or the implementation of initiatives or new technologies – CRM and Lead Management were recurring themes. There was nothing in the questions that asked respondents to talk about projects, but there were no uses of knowledge management to support day-to-day operations volunteered or as a way of making incremental changes to their day-to-day business. Instead, knowledge sharing was always described and linked to a specific project.

As a result, many of the factors that appear to be important to sourcing relevant knowledge become focused on project related criteria; particularly when it comes to identifying individuals with relevant expertise for informal knowledge sharing activity.

It was described by one respondent as 'Tell me who my partners are… [I want] a way of identifying people that are working on the same kind of projects as I am, or have the relevant expertise and experience in a market'

Much of the KM and KS literature has been centred on project based organisations. Coffey (2010) and Wiewiora et al (2012) are typical of authors who emphasise the importance of KS in project development. Carillo (2005), Fong (2008) and Landetta (2008) all stress the risk of knowledge loss and that if knowledge is not shared at the end of the project it can be irretrievably lost resulting in unnecessary reinvention, errors and time overruns. It can be argued that the company's knowledge centre was originally set up to avoid this happening.

The issue of identifying appropriate COPs within the organisation was highlighted as significant premium was placed on the ability to 'find the right person' within the company network for Knowledge Management. It should not be assumed – in this context – that knowledge management within a market/distributor is always effective. Several respondents indicated that finding information within their own structure was not always straightforward; respondents also reported working within their regional structure as well as the global structure, all of which made identification of the appropriate source less clear.

**5.3 On Line Knowledge Sharing Blog**

One tool that was cited early in the discussion by a significant majority of respondents was that of the organisation's online KS communication tool. Levels of awareness of this system were significantly higher than the other tools that were prompted as part of the interviews. Despite this relatively high level of awareness, feedback was not uniformly positive, with a number of reservations put forward about its use.

Whilst there was a general level of awareness of the tool amongst respondents, it was clear that the system had not penetrated all potential users within the distributors. Usage appeared to average between 15% to 25%. In some markets there was minimal use reported – either through a simple lack of awareness, or because they had a system used within the distributor and therefore simple issues, such as remembering to login IDs and passwords became barriers to use. As a result of the relatively low levels of usage in some markets, it was observed that responses to questions posted on the system were far from complete, as many users – who were potential sources of knowledge – did not use the system. Furthermore, even though groups had been established on a number of subjects, there was no guarantee that people with the appropriate knowledge or experience were part of these groups.

The online KS tool raised the issue of the accuracy of the information found online. Discussions covering the accuracy of information shared on the system provided two opposite sets of responses. The system was described by some respondents as a 'Stream of Consciousness' in other words, what appears online was not necessarily proven or even thought through. As a result, they reported that they had less interest in using the system. On the other hand, other respondents reported that it was much better than other web based tools – particularly common platforms such as Google because information came from within the company and therefore could be trusted as accurate. This is partially explained by the use of the system to provide information through tools such as the Best Practice Guides as well as un-moderated comments. The fact that all comments were clearly attributed to specific users was seen as a benefit, as comments or questions could be followed up directly using email / phone.

Whilst many respondents reported using the online tool to post questions, there was very little positive feedback about the level or quality of responses. "Your question is not going to find its

way to everybody, and probably the right people are too busy to answer". As a result many respondents having used the system initially to ask questions then did not use it again.

**5.4 Relevance and Homophily**

As previously stated social scientists have documented that similarity is a powerful predictor on interpersonal connection (McPherson et al 2001). This is described as homophily or love of the same.

Wanberg et al(2014) identify that the two main drivers of homophily are firstly that individuals choose to connect with similar others and that secondly opportunities to connect with heterogeneous others are limited due to group organisation, organisational structures or physical location. In other words similarity breeds connection. Most of the studies identified that homophilywas based on interpersonal connections based on cultural and demographic similarities. This particular research identified that this did not necessarily apply at a personal level but had in the eyes of the respondents to do with similarity in market characteristics rather than personal ones. One of the major issues identified by nearly all respondents was the ability to find 'relevant' knowledge. The issue underlying this is the belief on the part of the respondents that it was not only the information that was important but also the source (market) from which it came. Depending on your own market determined what you thought was relevant. In exploring this three factors emerged that respondents measured themselves and information providers against. These were:

- Size of distribution network
- Maturity of Market
- Resources

The first factor that was described was that of network size; a distributor working with a small group perceived that they would have a very different context than one managing a distributor network of many thousands. Whilst this point is understandable, it was interesting to note that despite this, the topics of discussion – such as CRM – were common across markets.

The second factor was the maturity of the market as seen by the recipient of any information. This point appeared to be more focused on the underlying skills and processes used across the entire market and not the development of the distributor. As an example the US market was seen as being 'light years ahead' of many other markets – both from their perspective and that of developing markets. This has a twofold impact. Firstly, other more developed markets found less 'relevance' in markets that were not as developed as their own, but developing markets found interest in a range of sources. Resources were another factor identified as making knowledge sharing relevant or not. Several smaller distributors reported being 'put off' knowledge that was developed within larger markets, as they did not think they would be able to implement these concepts. To achieve what a large developed market suggested would be seen to require more resources than they had available so any advice would not be creditable.

The table below illustrate the impact of the three factors in distinguishing one market from another and in so doing identify not only the type and form of knowledge but also from where it originates.

| | Oceania (New Zealand) | Middle East (Kuwait) | North America (Canada) | Central America (Costa Rica) |
|---|---|---|---|---|
| **Size** | No | Yes | Yes | No |
| **Resources** | No | Yes | Yes | No |
| **Maturity** | Yes | No | Yes | No |
| | Interested in formalised research | Informal ideas generated within the | Align with formal research from US | Informal ideas from within the region |

| | |
|---|---|
| | generated in region or Europe/US Central America |

Using New Zealand as an example from Oceania for the company it would be regarded as a long standing mature market. There would be an established dealer network but the market would be regarded as small by comparison to countries of similar size but with larger populations. Their preferred knowledge source would be formal research conducted in Europe and the US both of which are mature markets but by comparison much larger in size.

Canada by comparison is a large market well- resourced and has been established from the start of the global corporation. As a neighbouring country the Canadian market looks for information from the US. New Zealand possibly due to its cultural and historical heritage looks to both Europe and the US.

Kuwait as an example of the Middle East is a relatively new market that has grown primarily on the back of oil development and is particularly well resourced. The orientation they take for KS is primarily in their own region and also in Central America where they believe there are similarities. The Kuwaiti sales organisation is not looking for formal research but more informal idea generation which they can assimilate appropriately for their own market and culture. However by comparison despite being regarded as coming from Central America, Costa Rica only regards information sources within its own region as being relevant and does not source information from the Middle East. As a developing market it too is looking more for ideas that can be tried as opposed to formal research.

These findings present an interesting challenge to the conventional view on KS theory. The idea that interpersonal similarity is the major driver for knowledge exchange is challenged in that this calls for a wider perspective to be included in any analysis.

The various sales organisations within the global car company will inevitably have some cultural similarities and linguistically all of their meeting are held in English. But it appears a major factor is the status of the market they come fromand how that matches with the profile of potential knowledge sharing partners.

**6.0 Conclusions and Recommendations**

Throughout the research into KS in the academic literature there is a constant theme that the effective sharing of knowledge is facilitated by the fact that people share more readily with people like themselves. This was described as 'homoplily' and was deemed to apply primarily to people with similar personal characteristics. These characteristics were primarily based on issues around gender, race, culture and linguistics. This analysis of KS in a global corporation identified that there was a broader dimension in the form of the market characteristics that were perceived to be similar between markets. The dimensions of size, the resource base and the maturity of the market was seen as the determining factor on whether knowledge would be sought or even accepted as creditable even when received. As a result personal factors, geography, linguistics and culture were seen as less relevant than the market dimensions.

The implications for KS in organisations are important. Often businesses will organise forums based on regions or even more widely with the expectation that by mixing people informally KS will take place. From this research it would be better to facilitate interaction between organisations that have similar market characteristics not necessarily those from the same region. By bringing similar markets together however widely dispersed would appear to raise the potential for effective KS to take place.

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**Appendix 1**

**Outline Structure of Knowledge Sharing Interview Research**

- If you identified a knowledge gap or within your organisation where would you go to for advice and help?
- Do you have a formal network of people that you seek information from? e.g. as part of the meeting structures within the company.
- Do you have an informal network of people in the company who you turn to for information?
- Have you contacted the GKC for information?
- Have you used the online Chatter platform?
- If so what were the most useful and least useful elements?
- It is widely recognised that knowledge sharing benefits the organisation. If you wanted to improve how knowledge was shared in the organisation what would you propose?
- If you have a problem which needs to be addressed would you prefer formalised researched solutions or more flexible ideas that are not fully developed?
- In ideal world, are you looking for breath and/or depth of knowledge/materials from a central knowledge sharing resource?
- One way that information has been shared is by user generated content such as Wikipedia. Is this approach to Knowledge Sharing something that you feel would be useful if this was an approach set up by the GKC?
- Have you been approached to share information with people within the company but outside your organisation?
- If so in what form did this request come?
- How did you share the information?
- Are you happy to share your knowledge and best practise with others in the organisation?